

Title (en)

HYDROTREATING PROCESS FOR RESIDUAL OIL

Title (de)

HYDRORAFFINIERVERFAHREN FÜR RÜCKSTANDÖLEN

Title (fr)

PROCEDE D'HYDROTRAITEMENT POUR DES HUILES RESIDUELLES

Publication

EP 1010744 A1 20000621 (EN)

Application

EP 99921262 A 19990525

Priority

- JP 9902743 W 19990525
- JP 14365398 A 19980526
- JP 14366098 A 19980526
- JP 18550098 A 19980701

Abstract (en)

The invention relates to a method of heavy oil hydrogenation, precisely to a method of heavy oil hydrogenation for which a part of the catalyst to be used is a regenerated catalyst, and concretely to a method of heavy oil denitration and to a method of heavy oil desulfurization. It is characterized in that heavy oil is passed through a layer of a regenerated catalyst or a layer containing a regenerated catalyst. With the specific catalyst disposition employed in the method, heavy oil can be well hydrogenated under the same conditions as those for ordinary heavy oil hydrogenation with fresh catalysts. The method is significantly effective for efficient utilization of used catalysts. <IMAGE>

IPC 1-7

C10G 45/04

IPC 8 full level

C10G 45/04 (2006.01); **C10G 49/00** (2006.01); **C10G 65/04** (2006.01)

CPC (source: EP KR US)

C10G 45/04 (2013.01 - EP KR US); **C10G 49/002** (2013.01 - EP US); **C10G 65/04** (2013.01 - EP US)

Citation (search report)

See references of WO 9961557A1

Designated contracting state (EPC)

BE DE FR GB IT NL

DOCDB simple family (publication)

WO 9961557 A1 19991202; EP 1010744 A1 20000621; KR 100600189 B1 20060712; KR 20010022250 A 20010315; TW 483931 B 20020421; US 6406615 B1 20020618

DOCDB simple family (application)

JP 9902743 W 19990525; EP 99921262 A 19990525; KR 20007000823 A 20000125; TW 88108550 A 19990525; US 46338700 A 20000301